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09/816,227	03/26/2001	Masahide Tanaka	108855	5802

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EXAMINER

RIMELL, SAMUEL G

ART UNIT	PAPER NUMBER
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2175

DATE MAILED: 01/16/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/816,227

Applicant(s)

TANAKA, MASAHIDE

Examiner

Sam Rimell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.

- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**SAM RIMELL**  
**PRIMARY EXAMINER**

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-16 and 22-28 and 41 are rejected under 35 U.S.C. 102(e) as being anticipated by Ohsawa et al. (U.S. Patent 6,509,900).

Claim 1: Ohsawa et al. discloses a memory (HDD device) that stores a plurality of digital images. The entities which provide the images are inherently image providers. The system includes an image server (102) that performs the programmed functions illustrated in FIGS. 203. At step S205 a block of programming acts as a recorder and records the popularity of a given image which has been requested for retrieval. At steps S300-S306 in FIG. 3 a block of programming acts as a controller to control a condition. One such condition is the amount of memory space available on the high speed HDD retrieval system.

Claim 2: In Ohsawa et al., one condition which can be controlled is the amount of available memory space on the HDD retrieval system. This controls the number of digital images that can be stored on the HDD retrieval system.

Claim 3: The recorder (Step S205) records the popularity of an image, and thus the number of orders being made for that image.

Claim 4: In Ohsawa et al., one condition is the amount of space available on the HDD retrieval device. As seen in FIG. 3, this is dictated by the number of times an image is retrieved (i.e. the image popularity). As seen in FIG. 3, the memory space on the HDD is expanded by

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erasing images of low popularity. Thus, this action becomes a control of the condition (available memory) based upon the number of orders (popularity) of an image.

Claim 5: The amount of available memory space on the HDD determines the number of images that can be stored on that space.

Claim 6-7: The controller is the block of programming defined in FIG. 3. This controller acts to increase the space for digital image data that is most popular. That is, the controller increases the memory space for popular images, thus increasing the number of more frequently accessed images. The controller does this by physically erasing the least popular images on the HDD. That is, the controller decreases the number of digital images for images that are least frequently accessed.

Claim 8: The users (100, 101) in FIG. 1 are the searchers that search for image data.

Claim 9: The given condition is the memory space available on the HDD which in turn dictates the number of images that are placed on the HDD. As seen in FIG. 3, the memory space is managed based upon the number of orders for images (the image popularity).

Claims 10-11: In Ohsawa et al., additional conditions exist besides the available memory space on the HDD. A second such condition that can exist is the degree of popularity for each image. This equates to the number of orders for that image. An image meets the condition of being “popular” or “unpopular” based on the number of times it is ordered.

Claim 12: The first condition of available memory space on the HDD is imposed on image providers, since image providers cannot provide more images than physical space limitations permit.

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Claim 13: Providers of more popular images are entitled store more of their images on the HDD than providers of less popular images, since the less popular images are erased.

Claim 14: Conversely from claim 13, providers of less popular images are entitled less space on the HDD than providers of more popular images.

Claim 15: The HDD drive and CD Rom changer are readable as a printed matter production system.

Claim 16: The image server (102) reads as an acceptor of images.

Claim 22: See remarks for claim 1.

Claim 23: See remarks for claim 4.

Claim 24: See remarks for claim 1 and 8.

Claim 25: The condition is the amount of available memory space on the HDD. This condition is changed based upon the popularity of images, which correlates to the number of orders for those images. For example, less popular images can be erased, thus changing the available space condition.

Claim 26: The given condition is the available space on the HDD. This space is controlled by a relationship between popular images and unpopular images. The most popular images are supposed to be located on the HDD, and the CD-ROM changer is supposed to contain a copy of all the images, so how the search is fulfilled depends upon how popular an image actually is. More popular images are found on the HDD and less popular images are found on the CD-ROM changer.

Claim 27: See remarks for claim 12.

Claim 28: See remarks for claim 26.

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17-21 and 29-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohsawa et al. (U.S. Patent 6,509,900) in view of Nishikawa (U.S. Patent 6,421,141).

Claim 17: Ohsawa et al. differs in that it does not include specifications for printers used by the users (100, 101). However, Nishikawa discloses a digital image processing and printing system such that could be usable by the users (100, 101) of Ohsawa et al. FIG. 13, parts 618-620 of Nishikawa provide for an algorithm which permits the selection of an individual printer, based on the desired color reproduction capabilities (col. 10, lines 39-47 of Nishikawa). It would have been obvious to one of ordinary skill in the art to modify each of the user stations (100, 101) to include multiple printers and capabilities for selecting a desired printer so as to enhance the available options for color reproduction as taught by Nishikawa.

Claim 18: Within the combination of Ohsawa et al. and Nishikawa, the “proposer” is the database of images on the HDD drive of Ohsawa et al., the “acceptor” is the imager server of Ohsawa et al. and the decider is the user (100, 101) of Ohsawa et al.

Claim 19-20: Within the combination of Ohsawa et al. and Nishikawa, the selector is the algorithm for selecting a printer (618-620) in Nishikawa.

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Claim 21: The system of Nishikawa can select from one of several printers having differing capabilities, depending upon the needs of the print job.

Claim 29: Ohsawa et al. discloses a memory (HDD device) that stores a plurality of digital images. At step S205, a block of programming acts as a recorder and records the popularity of a given image which has been requested for retrieval. Ohsawa et al. differs in that it does not include specifications for printers used by the users (100, 101). However, Nishikawa discloses a digital image processing and printing system such that could be used by users (100, 101) of Ohsawa et al. FIG. 13, parts 618-620 of Nishikawa provides for an algorithm which permits the selection of an individual printer, based on the desired color reproduction capabilities (col 10, lines 39-47 of Nishikawa). It would have been obvious to one of ordinary skill in the art to modify each of the user stations (100, 101) to include multiple printers and capabilities for selecting a desired printer so as to enhance the available options for color reproduction as taught by Nishikawa.

Claim 30: See remarks for claim 21.

Claim 31: See remarks for claim 18. In addition, the storing is accomplished by the CD-ROM changer of Ohsawa et al. and the deciding is accomplished by the printer selection algorithm of Nishikawa.

Claim 32: Permitting users (100, 101) in Ohsawa et al. access to the images is the step of informing users of proposals. Having one of the users make a selection of an available image is the step of hearing a response from the user.

Claim 33: A plurality of images can be proposed to the users of Ohsawa et al., and any number of selections of desired images can be made.

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Claim 34-35: Ohsawa et al. stores digital images in the CD-ROM changer and HDD system. Displaying to the users (100, 101) the images which are available is the step of proposing optional digital image data. Having the users select images for downloading is the step of accepting selections. Having the users use an algorithm from Nishikawa to select the printers for printing is the step of producing the printed matter. It would have been obvious to one of ordinary skill in the art to modify Ohsawa et al. to have the users (100, 202) to include multiple printers and a printer selection algorithm for the reasons previously cited herein.

Claim 35: See remarks for claim 34. Further note that the system at the user location in Ohsawa et al. can change the selection of printer using the algorithm of Nishikawa.

Claim 36: The container is the system Ohsawa et al. which includes the printers and printer selector of Nishikawa. It would have been obvious to one of ordinary skill in the art to modify Ohsawa et al. to include the printers and printer selector of Nishikawa for the reasons previously recited herein. In addition, binding the printed digital images, such as by a photo album or book is very well known in the art and would have been obvious to one of ordinary skill in the art as technique for storing and protecting the digital images.

Claim 37: The system of Ohsawa et al. stores digital images. The digital images are proposed to users (100, 101) and selections of digital images are made by those users. Nishikawa et al. discloses a set of printers and printer selector for printing the digital images at the user site. It would have been obvious to one of ordinary skill in the art to modify Ohsawa et al. to include the printers and printer selector of Nishikawa for the reasons already recited herein.

Claim 38: See remarks for claim 33.

Claim 39: See remarks for claim 37.



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Claim 40: See remarks for claim 37. Further note that selection changes can be made in the sense that printer selections can be changed.

Any inquiry concerning this communication should be directed to Sam Rimell at telephone number (703) 306-5626.



Sam Rimell  
Primary Examiner  
Art Unit 2175